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LEADING ARTICLES

WORK IN THE LABORATORIES OF EUROPE.

L. H. WARNER, M. D., PH. D.

BROOKLYN, N. Y.

For actual research work we must give the crown to the European medical centers, while the crown in surgery belongs to the American surgeon. It was my fortune to be invited by Prof. Von Noorden to come to Vienna, to be present during a series of experiments which he would take up this spring. Following this I had an invitation from Sir Almroth Wright of London, who invited me to visit him regarding our correspondence, relating to mixed bacterines for the treatment of tuberculosis; the latter were the results of my individual work, and I had corresponded with Sir Wright for some months regarding their practical use. My method interested him, but was new to him, he using simply an emulsion, and hence his invitation to come to London to be with him in St. Mary's Hospital to make a number of inoculations of patients to test the merits of what I claimed was original in my studies.

During my frequent visits to the universities, clinics and laboratories of the continent, I have found so many good American physicians who go over for a like purpose but mostly unprepared to gain the special knowledge they are searching for. They go to the laboratories so to say haphazardly. They read in the journals what can be done in the laboratories; go there, but what knowledge do they derive in the short time at their command? They seldom if at all come in contact with the master mind. They are placed under the care of the chief assistant, but the latter is not the master mind. It has been my privilege since the day of my graduation in 1884, in the University of Heidelberg, to be associated with the leading lights of scientific medicine of Europe, and after I had finished my career of medicine I was called to the United States, where in the government service, I studied epidemics of cholera in China and Japan, yellow fever in South America, erysipelas among the Indians in Alaska, and served as pathologist during the Spanish-American War.

This year's trip to Europe landed me at Hamburg. My first step was to go to Berlin at the invitation of his excellency Prof. Robert Koch, and through his good influence I came in close contact with Prof. Wasserman, otherwise known as Geheimer Medicinalrath, a title of great distinction for a man of his age to hold. You all know of the Wasserman reaction; at least you have read of it. We have seen it tried in our laboratories. I had tried the Wasserman reaction in my own laboratory and never had more than 40 per cent of good results. I was on the verge of condemning it until I went to Berlin. I went to Prof. Wasserman, and I learned what folly it is to depend only on what you read, instead of going to the master mind and see him work, work alongside of him, where you can see actual demonstrations and proofs. If you know and understand the facts with which you are dealing in the problem of the Wasserman reaction, you know that today it is absolutely impossible to apply this test in local centres; one has to go to the larger cities like New York, to get the material that is necessary for this test. You cannot get the necessary implements at random. In Berlin, as I will show you later on by illustrations, they have the grandest hospital that this world has ever seen, the Virchow Hospital, in which one pavilion, or rather entire building, is set aside exclusively for syphilitic cases, and they have accommoda-

tion there for 3,000 patients. This section is always filled, and right opposite we find the department of infectious diseases (Infections Krankenhaus) where abundant material is continually kept fresh on hand; it is here where Prof. Wasserman can show you 100 per cent positive reactions. We have no benefactor or a United States government backing the medical profession to erect such institutions, nor have we men like Koch and Wasserman, men who absolutely need not care about patients coming into their office to bring them necessary financial returns to uphold their station in life. The government stands back of them and says: "Go in for research work; your appointment is for life, and if you are disabled the government will stand back of you and pay you." I would like you to understand that the Wasserman reaction does not give you a positive reaction in connection with syphilis alone. It will also give it in cancer, tuberculosis, etc. Now then, where do you stand? The reaction is of doubtful value, if intended for latent syphilitic cases. In 1899 I undertook to examine the blood of 4300 odd cases of syphilis in the Skin and Cancer Hospital, Post-Graduate, Metropolitan and City hospitals of New York, and found that in all cases of syphilis, primary, secondary, tertiary or latent, I always got one little blood corpuscle known as the crenated ameboid—not the crenated corpuscle. The latter you will find in a great many patients, but the crenated ambeoid cell, which has that peculiar movement that you might sometimes observe in tertiary malaria, a semi-circular movement, you will only observe under conditions I will mention later on. I found this corpuscle by accident. I had examined probably hundreds of cases of syphilis before I really recognized the value of this little corpuscle that meant so much to medical science. Dr. ——came to me one after noon at the Skin and Cancer Hospital, and requested me to take a specimen of his blood. I was very busy, but to oblige him I said, "All right, I will take it." I looked over it. It looked all right. Four hours afterward he came to me again. He said, "Doctor, take my blood." Well, then I thought he was just fooling with me. He said, "No, honest, I mean it." I said, "You mean what?" He said "I have just been home"—he lived on East 16th street, between First Avenue and Avenue A, and there was a case of smallpox in the house. The health officer had come and vaccinated him. He said, "I would like to see what the effect of vaccination is upon the blood." To my great surprise I found the crenated ameboid corpuscle. There was sufficient ground for the scientific worker to go on and investigate, and I did investigate. I got into communication with the health commissioner, who gave me permission to examine the blood of any number of cases that were coming to the Board of Health for vaccination, providing naturally, that the applicants would have no objection. I took their blood before they went into the vaccination room. As a rule it was normal, you might say. Of course there were some people anemic; others chlorotic, etc., but I did not get any evidence whatever of the crenated ameboid corpuscle, but after vaccination I invariably found the same. I figured then that in the question of vaccination we were dealing with a virus, and I began to work on the theory that virus was the real infective agent in syphilis. Dr. G., surgeon at the Skin and Cancer Hospital, asked me then to investigate a number of cases of cancer, and in every case of cancer I found that identical corpuscle. Now, I could not find this corpuscle in any other disease, look wherever I might, and I examined at an average 40 to 50 specimens of blood a day, for that particular corpuscle only, but I always found it in the above mentioned three conditions. I have had doctors come to me, men brilliant in the profession, men high up in pathlogy, but men that had not had the opportunities that I had to study hematology for years under the tuition of master minds; they like me observed the crenated ameboid cell, but they lacked the knowledge of technicalities in differential staining. The latter you must thoroughly understand when you deal with virus elements, acid elements. If you take a vaccine point and test it you get an acid reaction, and consequently, in the blood inoculated with virus, you are sure to get neutrophilic acid granulations, or otherwise neutrophilia of the leucocytes. We have that in syphilis. Cancer is always accompanied by neutrophilia; these are factors. My laboratory is open to you at any time. Demonstrations are always willingly given. I have demonstrated this in the hospitals of New York. I have offered the physicians and hospitals in Brooklyn the opportunity to come and see the work. I claim to be the originator in establishing the presence of the crenated ameboid corpuscle in infective diseases which I claim are due to a virus. My observatons were published in the Medical Herald, St. Joseph, Mo., after which I was invited by thirteen different state medical societies to give a lecture on this subject. A reprint

of this lecture is at your disposal upon request.

Since my investigations, now ten years old, we come to the latest stage and find that the Spiroochetea pallida is supposed to be the infective agent in syphilis; this is accepted now by fairly all the medical profession, but the great difficulty is that we have not been able to produce a culture of it. Learned men, such as Wasserman, Nicolai, Kraus, Porges, have shown me slides of blood from syphilitic persons, claiming that certain spiral bodies represented the Spirochoteae Pallidae. In order to observe this body you must have a special illuminant, and you have to use an asphaltum or other dark smear over it, a very dark coloring. Whether the spiral bodies are really the Spirochotea Pallidae or simply the cracks in this coating, showing a little filiform element, I am unable to state, until we are able to cultivate or grow this by incubation. To these very same gentlemen I showed that in most every case, where the Wasserman reaction proved positive, we also found the crenated ameboid cell in the living blood. I will tell you of another reaction which I claim is more exact, of more use to the genreal practitioner, because each and every one of you can do it right at home in your own office. You need not resort to a laboratory. If you wanted the Wasserman reaction, you would have to go to a laboratory where extensive apparatus and material are on hand, and it requires practice for successful tests. The only objection they had to it was: "But you get this corpuscle in cancer, and you get it after vaccination." They were not sufficiently impressed with my teaching that it was a matter of pathological stain that would bring about the differentiation. One of the very best men, Lange, in Leipsic, said to me, "It is all right, Warner, you have cancer there, and you tell me you get the crenated ameboid cell, but wouldn't you get that somewhere else?" Now, I wasn't going to commit myself. I haven't seen it anywhere else, excepting as previously stated, but I wasn't fool enough to say right up and down "No, I won't see it anywhere else," because I don't know what we might see. We might get some bug from the north pole,something new on hand and then I would be in a boat. I am in the habit of speaking extemporaneously, but I gave a promise to Prof. Van Noorden and his first assistant, Dr. Porges, to bring before you the subject of the Porges syphilitic test exactly as they gave it to me, so you will excuse me if I give their exact words by reading a short abstract of their late publication, entitled

"SERUM DIAGNOSIS OF SYPHILIS"

Method of O. Porges, M.D., of Prof. Van Noorden's Clinic, Vienna.

In the earlier part of 1908 (see Wiener klinische Wochenschrift XXI, No. 21) Dr. O. Porges in collaboration with Drs. H. Elias, E. Neubauer and H. Salomon, all of Prof. Van Noorden's medical clinic in Vienna, reported on the theory of serum reaction in syphilis, and it was my good fortune during my recent visit to Prof. Van Noorden's clinic to see Dr. Porges' method successfully employed with 100 per cent accurate and good results. While the above named workers were engaged elaborating if possible on the Wassermann reaction of syphilis, they noted that the fundamental principle of the latter test was due to a colloid reaction between lues serum and certain organic colloid substances, and it was observed that like results could be had by a precipitation process. A great deal of time and labor were needed to make the precipitation test of practical value. The first trial to employ the precipitation method for serum diagnosis of syphilis is to be credited to Foruel and Schereschewsky (Muenich Md. Wochnschrift 1907, No. 30). The latter contended that the serum of syphilitic blood in the primary stage contain antigens, and in the latter stages antibodies. With this contention in view they proceeded to mix the serum of cases of secondary syphilis with serum of metaluetics, which enabled them to observing formations. Other observers only observed this phenomenon in few instances. L. Michaelis observed precipitate formation between luetic serum and an extract from luetic fetus liver. Finally Porges and Meier noted that a precipitate reaction between a supension of lecithin and luetic serum was practicable and upon test showed to be as reliable as the Wassermann complement union, noting at the same time that the accuracy of the test depended upon the uniformity and purity of the control material. Porges and Meier selected from the various lecithin preparations submitted to them,the lecithin Kahlbaum, while some other workers employed afgalecithin. Amongst other points they noted that lecithin products of the same firm gave suspensions of differential stability. They attributed this differentiation of suspensive stability to the solubility of the lecithin in question, the splitting of the fatty acids and partly to physico-chemical changes, of the suspensions as noted in all hydrosoles (hysteresis). These ob-

servers had previously proven that normal sera with lecithin addition gave slight precipitate reaction, and it was therefore necessary to establish by lengthy investigations the quantitative lecithin addition to make their test useful for sero diagnostic work. Of the greatest importance is what Porges and Meier consider the correct quantitive estimate between lecithin and serum.

They noted that the serum of phthisis and tumor cases reacted similar to lues serum if acted upon by lecithin. All these observations led them to select for their precipitation reaction the natrum glycocholicum (Merck) which prevents all the aforementioned similar reactions. This substance dissolved in distilled water gives a clear solution so that the fault, while employing lecithin, the unevenness of the suspensions is avoided. This preparation is a dry powder which prevents decomposition which occurs in the pasty substance in which lecithin appears. Their experimentations gave the following data:

	Wassermann Reaction	Precipitations with Natr. glycocholii
Lues (cases under treatment)..	+ 5	+ 4
	— 8	—11
Lues (not yet treated).....	+ 7	+11
	— 2	— 0
Lues latent (early).....	+ 2	+ 0
	— 4	— 6
Lues latent (late).....	+ 8	+ 7
	— 7	— 8
Lues questionable.....	+ 4	+ 4
	—11	—12
Taleo paralysis.....	+ 6	+ 4
	— 3	— 6
Tuberculosis.....	+ 5	+ 3
	—28	—24
Neoplasms.....	+ 2	+ 1
	— 9	—13
Diabetes.....	+ 1	+ 2
	— 6	— 7
Control cases (fever).....	+ 2	+ 1
	— 5	— 6
Control cases (without fever)..	+ 4	+ 1
	—12	—19
Number of sera examined....	144	150

The above table is positive proof that all syphilitic cases, heretofore not treated gave a positive reaction by the natrum glycocholicum precipitation test, while cases which had been under treatment for some time gave a negative reaction in the majority of instances. This test is therefore of great importance in doubtful cases in which a diagnosis is wanted. Of the latent cases one-third gave positive reaction. Comparing the results by the Wassermann reaction we note a larger percentage of positive reaction in heretofore not treated cases of syphilis than appears in cases already under treatment. This proves the effect of mercury medication upon the serum reaction of syphilis,a fact to which Citron (Berlin klin. Wochenschrift 1907, No. 43) and others called attention. The question arose to what use can we employ natrum glycocholicum for serum diagnosis of syphilis. If one takes into consideration that the Porges control of material mostly concerns cases whose serum runs apparently between normal and lues serum, namely, serum from cachetic individuals, then the number of positive control cases is a very small one. It is about as large as that observed by the Wassermann method, and in mixed control materials the percentage of positively free lues cases would become a very small one. Observers like Fritz and Krenn (Wiener klin. Wochenschrift 1908, No. 12) at one time experimented with natrum glycocholicum, this before Porges had completed his method, found 17 positive reactions, about 65 per cent in 26 cases, amongst which all primary and early secondary cases gave positive reactions. Brueck and Meisser conjoint originators of lues diagnosis find unsatisfactory results from the Wassermann reaction. The Porges method is explained as follows:

Freshly prepared 1 per cent solution of natrum glycocholicum (Merck) in distilled water is mixed with equal parts of absolutely clear, at 56 deg. half centrifugalized serum. He employs small precipitation tubes about 6 to 7 min. in diameter filled with o, 2 cm. of each reagent. The specimen has to be kept 16 to 20 hours at room temperature avoiding vibratory disturbances. After this time clearly noticeable flakes have formed in positive sera, which are noted on top of the fluid. Turbid appearances only are to be considered negative. Porges considers the following modification as unreliable:

1. Separation of the two reacting substances, in which case one always finds a ring formed cloudiness, because various mixing conditions form in the single layers, amongst them such as cause a precipitation in any serum.

2. Employment of incubating temperature to accelerate there action. The easily soluble natrum glycocholicum is a good culture medium for micro-oragnisms.

3. Employment of an old solution for above reasons.

4. Addition of phenol to a solution of gallate of sodium as phenol, like any other acid, causes the precipitation of anode colloids, and thus natrum glycocholicum, for it would cause wasting diseases to come under positive reactions.

5. Employment of inhomogenous turbid sera and sera rich in hemoylotin as they are apt to cause errors.

6. Employment of special devices to observe the reaction such as side-lights, reflectors, etc. The reaction is only to be observed microscopically by clearly defined flakes. For the beginner it is advisable to have as a comparing standard, a well-flocked positive and a negative serum as in done in the Wassermann method."

If you were to be supplied in your office with these two little chemicals, one organic, one inorganic, you could go right ahead and make your own serum diagnosis of syphilis.

Now all that is necessary in this Porges test, is to have a standard blood of an apparently healthy person, and also the blood of a subject suspected of having syphilis. You have to have a normal serum; you have to have lecithin and glycocholate of sodium. All come prepared for these tests in little bottles. Now this is a very simple test. You all can do that. You can get that material from any druggist or chemical house, and it is not such a hardship to get the normal test. The first opportunity you have I wish you would give that test a trial. It is not hard work; as I stated, it is the work of Prof. Porges, of Vienna, chief assistant to Prof. Van Noorden's clinic, and for this very reason I think it should be given a test. I have spoken to a number of gentlemen that have followed my lines of study. They have made observations in different hospitals with this test, and the reaction is in every case, as they claim, positive, where positive was indicated by clinical evidence. I have submitted it to Dr. B. in New York, a man of very high standing, coming in contact with that kind of cases every day in the week. It is very simple test, and I thought it was worth while laying it before you, because each and every one of you can use it by having these little ingredients right in your own office and making the test.

Proceeding from Berlin, I went through several German laboratories. I found there was nothing very much going on in the laboratories at Leipsic and Dresden. At Vienna I got this modification of Porges test. While in Breslin I found one very interesting experiment there with Kwitlecky albumin test, you all know of him. He brought before me in his laboratory a modification test for albumin. You all know very well that if you were to take albumin and use a picric acid solution, you could not really get down to a final conclusion unless you waited twenty-four hours for a thorough sedimentation of the albumin element. With this modified test you can have it in forty seconds. That is a thing that is of great value to you again. I just want to bring before you points that I learned of over there. I am only too glad to distribute them amongst the medical profession. If you have an alkaline urine, you can acidulate it a little. Test: Fill acid urine to mark U in albuminometer, add 10 drops 10 per cent solution ferr. chlor., mix and add Esbach's solution to mark R. Place the tube in a glass bulb containing water at 72 F. Inside of 40 seconds you have your reaction and know exactly the amount of albumin you have. We have compared these statistics with all other methods known for the test of albumin and found it to be correct.

I intended to speak on the question of the etiology of carcinoma, but just before I started from New York I was requested to hold this point a little while, on account of certain things that leaked out that had been given out by Bashford of London, at the Budapest Congress.

You all know about the work that is being done in Paris by my old master, Metchnikoff. He has a new line of thought about the removal of the large intestine. He claims now that all toxemias arise in the lower bowel and that its extirpation has caused the prevention of disease of all kinds—good news for the surgeon anyway. It may appear light. It appeared so to a great many men when he first stated his claim, but, you know, he never states a thing unless there is a whole lot of gray matter back of it. Metchnikoff explained to me then what led him to this theory; it is this: Metchnikff claims that most diseases as well as senile changes arise from the continual absorption of poisonous substances produced by the decomposition of partially digested food in the lower bowel or large intestine. To prevent the formation of these poisons he elaborated and advocated the use of lactic ferment. While in London last May he examined the condition of a number of patients from whom a distinguished English surgeon had found it necessary to remove the large intestine. He endeavored to ascertain what bacteria, poison-producing or other were present in these patients, and what were their general chemical conditions now that his poison-

producing part of the digestive canal had been removed. At the Pasteur Institute in Paris, Metchnikoff uses large tropical fruit-eating bats or flying foxes for his experiments on the above lines. These bats have a very short intestine and a very few bacteriae of but a few kinds are found in its contents, while thirty or more varieties of the purefaction producing variety are found in the digestive canal of man. By proper feeding, Metchinkoff succeeded in freeing these bats from all intestinal parasitic bacteriae which are the cause of all poisoning and senile changes in man. Data from patients from whom the lower intestine had been removed may very probably furnish him with important facts for comparison with the conditions of persons who have not been deprived of this part of the digestive apparatus. His aim is not what has been erroneously quoted by the lay press to extend the lease of life, but to ascertain in a definite scientific way the true rules of internal and external hygiene.

Reports have been published already in the London Lancet, in the last three numbers, by leading surgeons of London, in regard to the removal of the lower intestine in 67 cases, the records showing not a particle of sickness ensuing. How much will come from it I do not know. I only tell you what I saw and heard, but coming from Metchnikoff, you have to pay some attention to it.

It was one of the most unfortunate occurrences this afternoon, when the brilliant paper of Dr. Critchlow was read and discussed by Dr. Laidlaw. That Dr. Laidlaw was cut short just at the very point where the important facts necessary for the medical profession were set forth. Vienna University makes it obligatory for its students to take one year's course in pathological chemistry. Dr. Laidlaw very wisely said this afternoon that we have tried this and we have tried that. We have tried bacteriology, we know all the bugs that are floating about, and we shall probably find some new ones when we get right down to pathological chemistry. We have had physiological chemistry; we have had organic chemistry, but get down to pathological chemistry—then we need not go looking about for the etiological factor of cancer and syphilis and cases of this and that sort, because pathological chemistry will give you the toxic agent you are dealing with. It is not the bacterium you are dealing with in infectious disease, but the toxin eliminated by it, disseminated through the organism. Hear what Dr. Critchlow said to you this afternoon; what Dr. Laidlaw said—the blood will take care of all if it is in its proper condition. It will go right to work and dissolve or neutralize these toxic bodies and make them non-toxic. But, is your blood in proper condition? That is the question. Why is it that so many doctors today are overlooking these facts? Take away the nourishment the blood furnishes to the tissues, and what will there be? Starvation of the tissues. Starvation will bring about inflammation. Inflammation will bring suppuration. Suppuration will bring infection. Suppuration germs will not attack any healthy tissue. They have to have something to imbed and breed upon. They must have an element of soil to work upon. So we have got to go on that principle.

My final trip was to go to visit Sir Almroth Wright by invitation, to demonstrate the virtue of mixed bacterial vaccines regarding which I had had a lengthy correspondence with him—a mixed vaccine for the treatment of tuberculosis. I do not know how familiar you gentlemen are with the use of bacterial vaccines, whether you have used them or not, and if you have used them, what results you had, but there are some new bacterines that have come out in London, in Sir Almroth Wright's laboratory, that have proved absolutely successful. One of them is the bacterine for eczema. It was not the creation of the mind of Sir Almroth Wright, but rather that of his first assistant, Dr. Fleming. The results have been magnificent.

They have also gotten up a bacterine to overcome some of the most serious skin diseases. I have seen that demonstrated in Charcot's Hospital. I have seen one of the worst cases of favus; have seen the inoculation done every day for nine consecutive days, and the scalp was absolutely clear and perfect. You have all heard of the reports from the surgeon-general of the army in regard to the bacterine of typhoid, how it has been employed and tested as an immunizing agent, and I really believe that when bacterines have been developed in a proper laboratory, not the commercial laboratory, we shall find in them an immunizing agent. The vaccine of gonococcus has been employed by the leading genito-urinary men such as Dr. G. of New York, Dr. B. of Cincinnati, the latter uses absolutely nothing but the gonococci vaccine in the treatment of gonrrhea, claiming that in each and every instance they have conquered the fresh new gonorrhea in from six to eight injections. I hardly believed that until I got a number of cases under my own observation. So the future of bacterial vaccines is great.

But I would say, as Sir Almroth Wright wisely says, if you have a case, and have sufficient belief in the virtue and therapeutic value of these vaccines so that you want to start your patient, begin with the stock vaccine if you cannot do any better, but by all means get the bacterial exudate of your patient and have an autogenous vaccine made. I found that out in my own experience.

Sir Almroth Wright up to the time of last June, when I was over there with him, had been using the tuberculin emulsion as his agent for inoculating his tuberculous cases. I must admit that the results were very gratifying, slow but sure. But it occurred to me in my investigation upon animals, in which I had inoculated three or four different species of virulent germs, that by taking the excreta and examining them, I found that I had larger colonies of one germ than another. That led me to examine the sputum of tuberculous patients in this manner—take the sputum and dilute it in like manner as you would dilute your blood in using the Zeiss-Thoma counter. Dilute it first with carbol fuchsin solution and heat it to the boiling point and centrifugalize, then add an equal proportion of 3 to 1 nitric acid solution for discoloring purposes, and finally, the third solution to be added is 1 per cent methylene blue solution and centrifugalize. Draw a small drop by Z. T. pipette and place upon the Zeiss-Thoma counting apparatus. You will find the tubercle bacillus stained red, the streptococcus or staphylococcus taking up the methylene blue stain, and you can make the count exactly as with your red or white blood cells, and get their percentage; for instance, 30 per cent tubercle bacillus; 40 streptococcus and 30 staphylococcus. Go to your cultures right then and there and make your bacterine vaccines accordingly, 30, 40 and 30 per cent. You have a typical vaccine fitting that individual case. I have only lately furnished this vaccine in Brooklyn, and I cannot tell you what the results will be, but I have had some individual cases where I employed this method and find the results are very encouraging. I cannot speak yet of any one cure, but the condition of the patients is so much better that I have a strong belief that they will thoroughly recover.

Cancer Research.—The directors of the St. Louis Skin and Cancer Hospital have made an appropriation of $6,000 a year for the study and investigation of the cause and treatment of cancer.

SOME RECENT ADVANCES IN THE SURGERY OF THE ACCESSORY SINUSES OF THE NOSE.*

R. H. T. MANN, M. D.

TEXARKANA, ARK.-TEX.

The advances which have been made in the surgery of the nose and throat within the last decade, have been so marked that it has been necessary for every text-book on this subject to be rewritten. The frequent involvement of the accessory sinuses of the nose, until very recently, was too often overlooked, and, even when a correct diagnosis was made, there were no means at hand whereby a cure could be perfected. So it is no wonder that many patients, who were sufferers from chronic inflammation of these sinuses, were treated from year to year by various specialists, with douches and sprays, from which of course, they derived no benefit.

Radical operations on the accessory sinuses of the nose, especially on the frontal sinus, were longer delayed than radical operations on other parts of the body, for the reason that any radical procedure on the frontal sinus produced so much deformity that few patients were willing to be disfigured in order to be cure. The frontal sinus, as you know, begins to develop in the second year and gradually develops until puberty, when its development is more rapid. It varies in size, very much in different individuals and in some is absent altogether. No deformity should exist after even the most radical operation on the maxillary sinus, as no external incision is necessary and the entire operative field is covered by the lip.

For the sake of convenience, diseases of the sinuses may be divided into two classes, acute and chronic. In this paper malignant growths are not considered. In Killian's clinic this summer, I saw in very successful use for acute cases, the electric light treatment. It is very worthy of trial, but I myself have not had sufficient experience with it yet to demonstrate its real value. Still we have at our disposal methods of drainage and other well known local treatments, which cure most of these acute cases, and drainage alone will cure many of the acute cases. Whether drainage is to be established by passing a probe into the frontal sinus through the nose or by making an external incision into the sinus and enlarging the infundibulum, depends largely on the choice of the operator. The external incision is the safer and especially is this true

*Read before the Medical Association of the Southwest at San Antonio, Texas, November 10, 1909.

if the operator has not had a vast experience in this class of work. A perusal of the anatomy of the parts will convince one of the danger of the nasal route. Deaths have been reported from perforations into the brain.

When the cases are chronic, however, we cannot hope for a cure unless by some radical operation.

I wish to illustrate the close proximity existing between the frontal sinus, the ethmoid cells, the sphenoid and maxillary sinus,so that it is the exception rather than the rule to have a chronic infection existing in any one of these sinuses alone. In many of these cases all of the sinuses are involved and any operation which is to be successful, must deal with the entire area of infection. It often happens, that all of these cavities must be opened for thorough inspection, drainage and removal of any diseased tissue or bone before a cure may be hoped for. Many patients are not cured, because in our efforts toward conservatism, hidden cavities of infection are left. Therefore, as far as possible, sufficient bone should be removed to give a good view of all the parts. The language of Prof. Killian's first assistant fully expresses the Germans' view of these operations and accounts for their remarkable percentage of cures. He says., "We do this operation so radical as we can."

The preparation for Killian's operation, which is the one giving the most gratifying results now, is the same as for any other operation. The hair should be clipped away from the eye brow and on account of the vascularity of the parts through which the incision is to be made, it is well to inject a weak solution of adrenalin along the whole line of the proposed incision. Then an incison should be made beginning at the outer side of the brow, one-eighth of an inch above the supraorbital margin and extend along its entire length. This incision should be made in almost a curve, following the orbit in its course downward and outward, across a part of the nasal bone and down on the maxillary bone to a point almost opposite the floor of the orbit. The periosteum should be included in the entire length of this incision, except one-third of an inch where the frontal and nasal bones unite, but under no circumstance should the incision extend through the periosteum at this point. Then the periosteum should be elevated with the soft parts over the entire field of operation, except that part which covers the supraorbital ridge, which must be left to support the soft tissues and this supraorbital ridge must not be removed under any circumstances, or deformity will surely result.

The soft parts are next dissected away from the periosteum over the supraorbital ridge, an incision made along the lower and inner side of the supraorbital ridge, parallel to the first incision and throuhg the periosteum. This incision should extend toward the outer side of the supraorbital ridge, sufficiently to allow the periosteum to be detached from the part of the orbit which forms the floor of the frontal sinus. The periosteum is next separated from the bone along the inner part of the orbit almost to the optic foramen and above and over all that part which forms the floor of the frontal sinus. The lacrymal sac is pushed aside with the periosteum but not injured. The pulley for the superior oblique is detached with the periosteum, but this results in no diplopia so long as it is detached with the periosteum.

The frontal sinus is next opened and all the bone covering the frontal sinus, except the supraorbital ridge is removed. This is best done in this way. With an assistant elevating the soft parts and periosteum elevated straightforward rather than backward, as is usually done, thus giving the greatest amount of space, the operator stands on the side of the patient, and with a "V" shaped chisel, opens the frontal sinus by chiseling toward the median line. A probe is next introduced into the sinus so as to tell its exact size, after which all the bone lying over the sinus is chiseled away. Then the mucous membrane, together with the diseased tissue and all spiculae of bone is curetted out. Then an opening is made through the nasal process of the maxillary bone. This opening is sufficiently enlarged to expose to view the ethmoidal cells and also the sphenoid after the ethmoid cells have been removed. The bone forming the inner side of the orbit is removed with a pair of forceps, the soft parts of the orbit being held back by an assistant with a protector. In curetting away the ethmoid cells, the curette must always be pressed downward, nor is it necessary to curette away all of the ethmoid cells, only open them up sufficiently for drainage. The sphenoid can now be easily seen and curetted. Next that part of the orbit which forms the floor of the frontal sinus is removed.

Great advantage is gained in the healing process by removing that part of the orbit which lies next to the ethmoid cells and forms the floor of the frontal sinus, since the soft parts of the orbit, to a very great extent, fill up the cavity.

The mucous membrane of the nose which lies over the ethmoid cells is next removed, then the middle turbinate, so that when the operation is complete, the frontal sinus, the ethmoid cells, sphenoid and nose all form on large cavity. The skin incision may be left open for two or three days for inspection, at the end of which time it may be united. The wound is gently packed with guaze and patient placed in bed on the healthy side so as to facilitate drainage. The after treatment can be carried on through the nose. It sometimes is necessary to remove some granulating tissue which is most likly to form during the healing process, and may be necessary to destroy it with a strong silver nitrate solution, nor does the discharge cease for a number of months. Any slight depression left over the sinuses may be relieved by an injection of paraffine.

It often becomes necessary to operate on the maxillary sinus at the same time as on the frontal sinus or a few days afterward. This consists in elevating the lip and making an incision over the canine fossa through the periosteum parallel to the margin of the lip. An opening is made through the bone sufficiently large to allow a thorough inspection. The mucous membrane and granulating tissue of this sinus can all be peeled out with forceps at once. The mucous membrane into the nose can be opened and turned into the sinus and the turbinate removed. The wound can be kept open for a few days by packing it so that it can be inspected from time to time. No suturing is necessary for the mucous membrane over the canine fossa, where it has been opened.

That these operations are not easy can be readily seen, especially the operation on the frontal sinus. If the surgeon has not learned well every step in the technique he cannot hope for a cure. If, however, the technique has been thoroughly mastered, they are not so difficult as they seem.

Fishermen Should Be Christian Scientists. —This is merely a suggestion on our part, based on an item on page 412 of Mrs. Eddy's book which is the law and guide of the sect. She says, "A child can have worms if you say so, or any other malady." Now, if fishermen are Christian Scientists sufficiently strong in the belief, it will simply be necessary to merely "say so," in order to have a supply of worms for the bait. —Meyer Bros. Druggist.

PRELIMINARY REPORT OF A CASE OF ACCQUIRED SYPHILIS OCCURING IN AN HEREDITARY SYPHILITIC.

C. D. SCOTT M. D.

ST. LOUIS.

The subject of the following report, A. J. R. presented himself for treatment at the Central Dispensary of this city on January 11th, 1910

He is a white male, single, age 20, a native of the United States, and by occupation a teamster

Family History.—His father, concerning whom he remembers little, met with a violent death in middle age; while his mother died of alleged kidney trouble at the age of 38. He has one brother and one sister living and healthy so far as he is aware at the present time. One brother and sister died a few (four or five) days after birth from causes unknown to the patient. As to others of his family he can give no information of apparent interest.

Personal History.—He suffered from the usual diseases of infancy and childhood, including scarlet fever, diphtheria, and from malaria at various times. He states it as a matter of recollection that as a child he was sickly, and remembers hearing his mother state that he was "hard to raise." Three years since he sustained a crushed foot, for which an amputation was performed, the same operation being resorted to on two occasions during his convalescence, on account of a gangrenous stump. One year later he received a gunshot wound of the knee, from which he made a satisfactory recovery. He had several attacks of gonorrhea at intervals during the past few years, but now considers himself well so far as gonorrhea is concerned. Upon the whole he has for some time lived a rather dissipated life, both sexually and otherwise. On the 23d of September, 1909, a small ulceration was observed upon the dorsum of the penis just posterior to the corona glandis. This did not occasion him much annoyance, but upon its becoming larger, in a few days he consulted a physician, who cauterized it. Shortly after this application the ulcer became more extensive and, he says, became hard and thickened, finally assuming the proportions of a silver half dollar piece. This was accompanied by swelling in each groin which did not cause him much pain, and which did not proceed to suppuration.

The penis condition was so severe that he found it necessary to enter the City Hospital, from which he was discharged with the ulcer healed, after a period of activity

amounting to eight weeks following his discharge from the hospital he noticed nothing wrong until December 25th, 1909, when he discovered an eruption upon the face and body.

The fact that this continued to become more pronounced over the entire cutaneous surface, occasioned his visit to the writer.

Present Trouble.—When first seen the patient was found to be of small stature, considerably under the average height, and states that his usual weight is 125 to 130 pounds, although he now weighs but about 100 pounds. Skin apart from the eruption pallid. Pulse, temperature, respiration normal. An examination of his body revealed in addition to the points mentioned, a singularly marked degree of forward curvature of each tibia, constituting an unusually well developed example of that deformity, commonly known as "sabre tibia."

This condition was especially marked on the left tibia. When standing erect with arms to the sides and palms fronting, the natural prominences in the regions of the heads of the radii, were seen to be much accentuated. Upon palpation this was found to be due to symmetrcal enlargement of the heads of the radii. Upon questioning, he affirmed that this had always been so, and that it occasioned him no discomfort.

The two upper central incisors wre deeply serrated, being excellent examples of the type known as "Hutchinson's teeth."

The integument generally, with the exception of the palmar and planter surfaces, was found to be covered with a papular eruption of reddish-brown color the lesions varying in size, from a small point up to that of a split French pea. These lesions were thickly distributed, being most numerous on the back and face, with a tendency toward coalescence over the regions lateral to the nose and on the chin. On the trunk there was exhibited a disposition to the formation of groups of lesions. A small greyish patch was found on the alveolar mucosa just over the upper central incisors.

Subjective symptoms (itching, etc.) were absent. The whole picture was that typical of the early papular syphilide which opinion was strengthened by the discovery of an indurated mass at the seat of the former penile ulcration, generalized and painless adenopathy, and a moderate degree of chronic pharyngitis. The inguinal glands were still enlarged, firm and painless.

A consideration of the facts as related above seems to warrant the following conclusions:

1. That the patient in question suffered at the time of his birth and up to a period, the exact date of which it is impossible to determine, from hereditary syphilis, as evidenced by the characteristic tibial deformity (sabre tibia) enlarged radial heads, Hutchinson's teeth, stunted growth; and prehaps by the family history, although not as yet fully investigated, discloses the fact of a brother and sister dying of some unknown cause within a few days following birth, and that his living brother, in childhood, was affected with similar (sabre) tibiae, from which, at the present time he has in a large measure recovered.

2. That this patient at some period, at present unknown, emerged from the immunity conferred by his congenital syphilis, and in time sustained a second infection with syphilis, this time with the acquired type, as manifested by the orderly apparance of a characteristic initial lesion, generalized adnopathy, papular eruption, pharyngitis, and a mucous patch on the upper gum, from which spirochaeta pallida were demonstrated.

3. That these conclusions being accepted, we are justified in stating that a complete recovery from hereditary syphilis has occurred.

While at the present-day medical literature contains a number of well authenicated instances of second attacks of acquired syphilis, evidence bearing upon the question of reinfection of hereditary syphilitics is very meagre and not overly satisfactory.

Taylor, in 1904, was able to collect but six cases from the literature, of which number he considers two as being unconvincing, and a third is undoubtedly open to question. It is believed by the writer that the present case presents evidence that is conclusive upon the point of the possibility of a reinfection of the congenital syphilitic; and that this evidence is of a more convincing character than that adduced in any of the hitherto recorded cases.

Hippocrates is the name of a new medical journal recently established in Constantinople, the first one published in the Greek language in Turkey. Dr. Achilles Rose, of New York, is named as one of the contributors. For lovers of medical history this new periodical will be of especial interest, as one part of it is to be devoted particularly to ancient Greek medical literature, bringing out original studies and researches in this field by the Greek physicians of Greece, Turkey and Egypt.

THE MEDICAL FORTNIGHTLY

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EDITORIAL

And Now to Get Busy.

The St. Louis Medical Society has had its annual election, has installed the new officials and the machinery for a new year has been set in motion. 1910 promises to be a very exceptional year for the St. Louis profession; the coming of the American Medical Association in June seems likely to eclipse all else; it is the event of the year, but measured from a judgment of the ultimate good it is quite as important that the meetings of the local body from week to week shall be so decidedly excellent as to comamnd the thoughtful interest of the profession, and that the May meeting of the State Association, in Hannibal, shall be made the best that that body has kown. There seems to be no need of urging on the profession the necessity of active interest in the June meeting, the establishment of large and active committees which have already gone far with the preliminary work makes the entire success of that occasion assured, but those things which may chance to appear as of lesser importance are not necessarily so and while it is busied with the great undertaking the profession does need urging not to overlook the everyday duties and obligations.

The inaugural address of President Schwarz lays down the lines for activities in many directions, all purposing the strengthening of the society in scientific, social and business ways and the greater unity of the profession under its influence and example.

The committees elected by the Council meet with general approval. The day is past when a man can accept a place on any of these committees and expect others to do the work, the places are for workers, and we believe that each of the men appointed is or is to be a worker. The following are the committees which are to aid President Schwarz and the Council:

Membership.—F. J. V. Krebs, chairman; Henry Schulze, Fred Fahlen.

Program.—Warren P. Elmer, chairman; Max Myer, A. G. Schlossstein.

Library.—Walter Baumgarten, chairman; A. E. Meisenbach, R. E. Wobus.

Publication.—E. A. Babler, chairman; W. U. Kennedy, Wm. Winter.

Medico-Legal.—W. E. Leighton, chairman; J. C. Falk, H. Lowenstein.

Public Health and Legislation.—H. N. Lyon, chairman; F. Esselbrugge, B. G. Benson.

Delegates to the Joint Medical Council.—Jno. Green, Jr., Hudson Talbott, W. H. Stauffer, G. C. Crandall, Frances L. Bishop, Bransford Lewis, Chas. Shattinger, Jos. Grindon.

President Schwarz has filled the vacancies in the Council by appointing Thos. A. Hopkins for the two year and F. J. Lutz for the one year term.

The Medical Society of City Hospital Alumni.

In speaking of the work laid out for the St. Louis Medical Society we are at once reminded that the City Hospital Alumni seem to have become rejuvenated in their society, and that the plans of that body for the year promise an activity which has not recently been known. Being a society of limited membership, it admitting only those who have served in the City and Female Hospitals, its sphere of influence is naturally much more limited than is the general organization of the city; but if the St. Louis society could command the same amount of effective ability and energy to its each unit in membership things would move much more rapidly. Sanitary and other reform movements seem to have a way of originating in the Medical Society of City Hospital Alumni in this city. But there seems to have developed a partial somnolence even in this society, which we have been hoping to see thrown off; a glance at the list of newly elected officers and the committees appointed leads one to a considerably expectancy for the year's work. President Hinchey, with characteristic energy has mapped out the year's work, announcing at its beginning where each meeting is to be held and the general character of the program, the combination of the social with the scientfic is to be a feature of alternate meetings. On June 16 the Steamer "Alton" has been engaged for the pleasure of members, their families and

friends. There can be no question as to the usefulness of combining business with pleasure, with a membership so characterized as that of this society there need be no apprehension of business being eclipsed by entertainment features.

The officers elected by the Hospital Society are:

President.—Frank Hinchey.

Vice-President.—C. H. Shutt.

Secretary.—W. H. Luedde.

Treasurer.—E. L. Dorsett.

President Hinchey has appointed the following committees:

Executive.— L. J. Oatman, chairman; Theo. Greiner, Percy Swallen.

Scientific.—F. C. Simon, chairman; N. Freund, A. G. Schlossstein.

Publication.—W. T. Coughlin, chairman; A. E. Horwitz, Ellis Fischel.

Entertainment.—Clarence Loeb, chairman; T. R. Ayars, Rolla Henry.

Public Health and Legislation.— Walter Fischel, chairman; Hudson Talbott, J. W. Shanklin.

Sanitary Conditions in the St. Louis Ghetto.

Some months since one of the magazines published articles on the sanitary condition of the buildings in which the very poor of New York are compelled to live and at the time we mentally compared some personal observations as to local conditions in our ghetto with the conclusion that we could, with entire truth, draw an even more awful picture right here. It has fallen to Dr. B. S. Warren, of the Marine Hospital Service, to publish an inkling of the truth relative to some considerable parts of our ghetto, and whatever may be said by owners, lessees, and real estate men it is true, awfully true. Some weeks since there was a movement agitating which contemplated proper baths, water and plumbing for this district,and the arguments brought out against any interference with existing conditions were so similar to those coming as a result of Dr. Warren's visit that it does not take a Sherlock Holmes to discover who is responsible for the evil. We have mentally condemned Trinity Church of New York for conditions on its property, but we find our own good board of Education compelled to make a like explanation of its responsibility or lack of responsibility, for 105 lots which it owns but has leased out of its control in so far as the buildings constructed thereon is concerned, in the character of these leases there is a distinct advantage to the leasee in keeping the building on the property in bad condition for rental increases with increased valuation.

It is all very well to say that these people over there would not know what to do with a bath tub if they had one, that they like filth and vermin, but it isn't truth.

Any one who has lived in a large city for even a decade with his eyes open has seen many of these people grow out of the ghetto, out of filth. Cleanly, ambitious citizens. The speed they make when the spirit of progress has once touched them is remarkable. The emigrant of twenty and thirty years ago was much slower in his progress and his ambition rarely carried him so far. We are glad to see that the Post Dispatch has taken up the agitation for a cleaner, better housed ghetto; there are powerful influences which will oppose the move, and the Post should be able to command the support and assistance of the medical profession to a man in this good cause.

Dr. Louis M. Warfield, formerly of St. Louis and recently of Savannah, Ga., has gone to Milwaukee, where he will be connected with one of the large schools and hospitals.

Dr. Tuholske Goes to the Tuberculous Society.—At a meeting of the Executive Board of the St. Louis Society for the Relief and Prevention of Tuberculosis recently, at the headquarters of the society in the Dolph Building, Dr. M. C. Tuholske was elected secretary of the society to succeed Robert J. Newton, who recently was appointed secretary of the Municipal Tuberculosis Commission. Dr. Tuholske was chief of the tuberculosis clinic of the City Health Department for three years, and is especially well fitted for the new position to which he has been appointed.

Washington University to Build an Obstetric Hospital,—The Washington University board of directors, in preparation for the erection of a hospital at King's highway and McKinley avenue, near Forest Park, has purchased two lots there. The lots front 200 feet on King's highway and are 175 deep. The site is opposite that selected for the Barnes Hospital, with which it is said the university is to be affiliated. It is announced the new Washington University hospital will be used for obstetrical cases in the place of the one now conducted on Jefferson avenue. It is probable the hospital also will have a department for the care of contagious diseases of children.

MEDICAL PROGRESS

Comprising the Regular Contributions of the Fortnightly Department Staff.

SURGERY.

C. W. HEPBURN, M. D.

The Diagnosis and Surgical Treatment of Fractures Involving the Long Bones.—In his article in International Journal of Surgery for September, 1909, Dr. William Fuller says that but two departures from old-time methods of dealing with fractures have become, in later years, recognized as valuable aids in this field of work: First, the discovery of the Roentgen ray; second, the operative treatment of fractures. Fractures of the long bones including the clavicle constitute about 75 per cent of all fractures. They are met with in people of all ages, in all walks of life, and under many circumstances. The first essential in making a diagnosis is a knowledge of the nature of the accident. Not infrequently this information alone will suffice for a diagnosis, but as generally furnished by the injured person, it is unworthy and too often misleading. The symptoms are objective and subjective. Under the objective manifestations mention may be made of (a) point of motion away from the joint line; (b) alteration in the surface anatomy amounting frequently to deformity; (c) malposition of the extremity which may at times afford valuable information; (d) crepitus. The subjective evidence of fracture is less important than the objective. Pain and disability are of relative value. Both symptoms are present in practically all contusions of any severity, and unless found in connection with the objcetive symptoms above enumerated, their significance is small. In view of the fact that the X-ray has furnished so many and such unexpected surprises in the study of traumatic bone lesions during the past few years, it is not to be wondered that the clinical manifestations in fractures are commanding less and less of the surgeon's consideration. In the treatment of fractures involving the long bones the indications are: First recognition and repair of all damage aside from the bone injury; second, replacement of the bone ends in their proper relation to each other, and the maintenance of their normal relationship till osseous union is sound and complete; third, massage and passive motion till the return of perfect function.

Skin Grafting at the Johns Hopkins Hospital.—In Annals of Surgery for September, 1909, Dr. John Staige Davis presents a paper based on a review of 544 house cases which had been skin-grafted in the clinic of Dr. Halsted at the Johns Hopkins Hospital. In this series of all types of grafts had been used, and skin defects on almost every part of the body had been grafted. The technic of Thiersch grafting is described in detail. Most of the grafts were obtained by the modified Thiersch method; a few by Reverdin's epidermic method.; and one or two by Lusk's blister method, and were classified as autodermic, where the graft was obtained from the same individual; isodermic, where the graft was obtained from another individual of the same species; zoodermic, where the graft was obtained from a lower species. A large number of interesting statistics are given in the general summary, and the following are some of the conclusions reached: The general health of the patient must be taken into consideration when skin grafting is contemplated, and grafts to be successful must only be transplanted to healthy wounds. As a rule grafts do not take well on luetic individuals. No antiseptics must touch the flaps before or after cutting. A general anesthetic is necessary in the majority of cases where large grafts are removed. It is best to cover the defect with a single large graft if possible, as the healing is just as satisfactory as if several flaps were used, and the scar is much less. Silver foil immediately over the graft has proved its worth, but it is best to apply it without the paper and not to use alcohol. Temporary moist salt gauze dressings are also very satisfactory. Grafting, even if only partally successful, in the majority of cases will shorten the time in the hospital and accelerate final healing. Partial grafting nearly always stimulates epidermal growth from the edges of the wound. Autodermic grafts take somewhat better than isodermic, but isodermic grafts are much more successful than is generally supposed. When a black superficial graft is applied to a defect on a white person the pigment disappears sooner or later, and vice versa. A page of illustrations accompanies the text.

Ununited Fractures.—In a paper on this subject, in International Journal of Surgery for September, 1909, Dr. Stuart McGuire, in discussing the constitutional causes of delayed union or non-union, such as age, pregnancy, lactation, acute infectious diseases, starvation, loss of blood, rickets, marasmus and syphilis, says that most of these are of doubtful influence, for it is a

strange but authenticated fact that failure of a fracture to undergo proper ossification is more apt to be observed in a vigorous adult than in the debilitated, the marasmic, or the aged. While it is true that syphilis and fractures are both so common that they must often coexist without detrimental influence one on the other, still, in his personal observation patients with delayed union have responded so often and so promptly to antisyphilitic treatment that it is now his practice to prescribe iodide of potassium in such cases as the first effort to secure union, and this whether any history of specific infection can be obtained or not. If it does no good, it does no harm; and, as we all know, syphilis, like accidents, is likely to occur in the best regulated families, and patients suffering with the disease are sometimes ignorant of their condition or untrustworthy in their statements. It must be understood, however, that it is the general debilitating effect of the disease, rather than bone syphilis, which is antagonistic to union, for it is well known that the osseous lesions of syphilis are all productive and sclerotic in character. When a surgeon takes charge of a case of ununited fracture, his first attention should be directed to the general health of the patient. An examination of the urine should be made; errors of digestion should be detected; anemia and debility should be combatted; and the general system placed in the best possible condition. If the case is not over a year's standing, iodide of potassium should be administered, unless the drug has already been tried without result. The local treatment should be based largely on the result of an X-ray examination. In some cases it will appear probable that the patient can be cured without subjecting him to an operation. In other cases it will at once be obvious that nothing short of operative surgery will prove effective.

Surgical Treatment of Trifacial Neuralgia.—In California State Journal of Medicine for September, 1909, Dr. Chas. D. Lockwood gives his experience with deep alcohol injection in trifacial neuralgia. In a year he has given 28 injections to 15 patients, all of whom received relief from pain. In two the relief was of short duration. Nine experienced immediate and complete relief, which lasted for periods of from one month to one year. Four were lost sight of or were too recent to report. At first the special needle and technic of Levy and Baudonin were employed, but now the author uses an ordinary exploring needle and glass syringe holding 2 c.c. of fluid, and locates the points of injection in the following simple way: Place the index finger firmly against the face just beneath the zygoma and ask the patient to open his mouth. In this way you can locate the condyle of the lower jaw, the sigmoid notch and the coronoid process. The injection for the inferior maxillary branch is made just in front of the condyle through the sigmod notch. The needle hugs the inferior border of the zygoma and is carried a little upward and backward to a depth of 4 cm. The injection for the middle or superior maxillary branch is made just in front of the coronoid process, which can be distinctly felt when the patient opens his mouth. The needle again hugs the zygoma and is carried slightly upward and inward to a depth of 5 cm. The injection for the ophthalmic branch is through the orbit close to its outer wall to a depth of 4 cm. This injection the author believes is too dangerous and unreliable to command confidence. The solution used has been either alcohol 80 per cent to 90 per cent, or alcohol 80 per cent containing cocaine or novocaine ¼ grain to 10 c.c. Two cubic centimeters are injected at each treatment. The author believes that if all cases of tic douloureux are recognized early and treated with alcohol injections before the pathologic changes have progressed far, it will reduce the number requiring the severer operations.

IMPORTANT RESOLUTIONS ADOPTED BY CHICAGO MEDICAL SOCIETY, JANUARY 11, 1910.

Whereas, the Chicago Medical Society is an integral part of a constituent society of the American Medical Association, and therefore vitally interested in the welfare of that great organization, and

Whereas, Certain conditions exist which menace the best interests of the members of the American Medical Association, and of the profession at large; therefore be it

Resolved, That the Chicago Medical Society in council assembled recommends the following changes in the policies and management of the American Medical Association, viz.:

1. The laws should be so amended that no one person will be permitted to hold, at the same time, more than one executive or honorary office in the Association.

2. The office of general secretary, and the positions of editor and manager should be separated, and no person should be per-

mitted to fill more than one of these places at one time.

3. The offices of editor and secretary should be filled only by men educated in regular scientific medicine and of unimpeachable professional records.

4. The number of trustees should be increased.

5. All officers and employes whose duties involve financial responsibility should be bonded.

6. The laws governing admission to membership in the American Medical Association should be so amended as to make it mandatory upon the secretary to enroll applicants who have complied with the provisions of the by-laws governing the same.

7. Space should be set apart in the Journal for free and courteous discussion of the policies and methods of the Association, or for any other matters which may appeal to the membership at large as bearing upon the interests of the Association.

8. Provision should be made for the initiative and referendum.

9. No member should be expelled from the Association without a fair trial and full hearing.

10. No member who is a general officer or member of the House of Delegates or Board of Trustees or employee of the American Medical Association shall be eligible to serve as a general officer or member of the House of Delegates, or Council, of any constituent association.

11. Be it further resolved, That the secretary of the Chicago Medical Society be instructed to publish these resolutions in full in the Bulletin of the society, and to transmit a copy of the same to the Journal of the American Medical Association and to the editors of the various state journals.

The International American Congress of Medicine and Hygiene, Buenos Aires, Argentine Republic, May 25th, 1910.—The Internation American Congress of Medicine and Hygiene of 1910 in commemoration of the first centenary of the May revolution of 1810, under the patronage of His Excellency, the President of the Argentine Republic, will be held May 25th in Buenos Aires, Argentine Republic. In order to facilitate the contribution of papers and exhibits from the United States, there has been appointed by the President of the Congress, Dr. Eliseo Canton, and the Minister of the Argentine Republic at Washington, a committee propaganda of which Dr. Charles H. Fraizer (Philadelphia, Pa.) is chairman and Dr. Alfred Reginald Allen (Philadelphia, Pa) is secretary. The Congress has been divided into nine sections, each section being represented in the United States by its chairman in this Committee of Propaganda as follows:

Section 1—Biological and Fundamental Matters, Dr. W. H. Howell, chairman, Baltimore, Md.

Section 2—Medicine and Its Clinics, Dr. George Dock, chairman, New Orleans, La.

Section 3—Surgery and Its Clinics, Dr. John M. T. Finney, chairman, Baltimore, Md.

Section 4—Public Hygiene, Dr. Alexander C. Abbott, chairman, Philadelphia, Pa.

Section 5—Pharmacy and Chemistry, Dr. David L. Edsall, chairman, Philadelphia Pa.

Section 6—Sanitary Technology, Dr. W. P. Mason, chairman, Troy, New York.

Section 7—Veterinary Police, Dr. Samuel H. Gilliland, chairman, Marietta, Pa.

Section 8—Dental Pathology, Dr. George V. I. Brown, chairman, Milwaukee, Wis.

Scetion 9—Exhibition of Hygiene, Dr. Alexander C. Abbott, chairman, Philadelphia, Pa.

It will not be necessary for one contributing a paper or exhibit to the Congeress to be present in person. Arrangements will be made to have contributions suitably presented in the absence of the author.

The official languages of the Congress will be Spanish and English.

Members of the following professions are eligible to present papers or exhibits: Medicine, pharmacy, chemistry, dentistry, veterinary medicine, engineering and architecture.

Papers may be sent direct to the chairman of the particular section for which they are intended, or to Dr. Alfred Reginald Allen, secretary, 111 South 21st street, Philadelphia, Pa.

St. Louis Delegates to the State Society.—The following are the 1910 delegates from St. Louis to the State association: Drs. William W. Graves, J. H. Amerland, Thomas A. Hopkins, H. L. Nietert, George C. Crandall, Vilray P. Blair, L. H. Hempelmann, Louis Rasseur, Willard Bartlett, Walter Baumgarten, Joseph Grindon, Walter C. G. Kirchner and Malvern B. Clopton, and alternates, Drs. Paul Y. Tupper, William E. Sauer, Frederick J. Taussig, Horace W. Soper, Jesse S. Myer, George Homan, E. Lee Dorsett, William G. Moore, William H. Luedde, Albert F. Koetter and Warren P. Elmer.

THE MEDICAL FORTNIGHTLY

A Cosmopolitan Biweekly for the General Practitioner

The Medical Fortnightly is devoted to the progress of the Practice and Science of Medicine and Surgery. Its aim is to present topics of interest and importance to physicians, and to this end, in addition to a well-selected corps of Department Editors, it has secured correspondents in the leading medical centers of Europe and America. Contributions of a scentific nature, and original in character, solicited. News of Societies, and of interesting medical topics, cordially invited.

Advertising forms close on the first and fifteenth of each month. Time should be allowed to submit proof for correction. Advertising rates on application.

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Editorial offices in St. Louis and St. Joseph, where specimen copies may be obtained, and subscriptions will be received.

Contributions and books for review should be addressed to the Managing Editor, 319 and 320 Century Building, St. Louis, Mo.

MEDICAL MISCELLANY

The Southern Surgical and Gynecological Association.—The twenty-second annual meeting of this association was held in Hot Springs, Va., on December 4th, 5th and 6th, under the presidency of Dr. Stuart McGuire, of Richmond, Va. Officers for the ensuing year were elected as follows: President, W. O. Roberts, of Louisville; first vice-president, Joseph C. Bloodgood, of Baltimore; second vice-president, Lewis C. Morris, of Birmingham; treasurer, William S. Goldsmith, of Atlanta; secretary, William D. Haggard, of Nashville. The next annual meeting of the society will be held in Nashville.

New Illinois Factory Law in Force.—The new factory law of Illinois which requires employers to promote the health, comfort, and safety of their employees, went into effect January 1. The law provides for the protection of employees against machine injury, by enclosed hatchways, elevators, etc.; the keeping of premises in clean sanitary condition, of equal temperature; and with toilet facilities, and prohibits the taking of food into rooms where poisonous substances are present; prescribes the removal of poisonous or noxious fumes as far as practicable, and a report to the state factory inspector of all accidents or injuries resulting in death. Failure to comply with any provision of this act is punishable by a fine of from $10 to $50 for the first offense, and from $25 to $200 for the second.

Prize for Medical Students.—The Undergraduate Medical Association of the University of Pennsylvania has given a new surgical prize of $75 for members of the fourth year class in medicine, beginning with the class of 1910. The prize will be given for the best essay based on observations in the University Hospital clinics in anatomy, physiology and pathology. Dr. Charles H. Frazier, dean of the Medical School, Dr. John Speece, and Dr. Edwin Sweet will be the examining committee.

Limitation of the Number of Medical Students.—At the next Congress of Practitioners, which will be held at Paris at the end of March, 1910, the question of limitation or non-limitation of the number of medical students who enter the schools will be discussed. In order to diminish the oversupply which seems to prevail in the medical profession, some physicians propose to establish competitive entrance examinations for the young people who intend to enter a medical career.

"Business Success and Failure."—The matter of "Business Success and Failure"—with some remarkable American statistics, relating to bankruptcy, will be discussed in the February Century by Frank Greene, of the Bradstreet Agency. "Perhaps the most conspicuous living example of success following earlier failure," Mr. Greene says, "is the Hon. Levi P. Morton, former vice-president of the United States, who, while a member of the dry-goods firm of Morton, Grinnell & Co., was forced to see his house suspend. In 1861 this firm stopped payment, later compromising and settling in part with its creditors. Men in business still recall the dinner given by Mr. Morton a few years later, where each creditor-guest found a check for the amount owed, with interest, a most pleasing sort of souvenir to bring away from a banquet."